

## C5772 Log Data Report

### Borehole Information:

<b>Borehole:</b>			C5772		<b>Site:</b>		216-U-10		
<b>Coordinates (WA St Plane)</b>		<b>GWL<sup>1</sup> (ft):</b>		None		<b>GWL Date:</b>		05/14/08	
<b>North (m)</b>	<b>East (m)</b>	<b>Drill Date</b>	<b>TOC Elevation</b>	<b>Total Depth (ft)</b>	<b>Type</b>				
Not available	Not available	Not available	Not available	Not available	Percussion				

### Casing Information:

Casing Type	Stickup (ft)	Outer Diameter (in.)	Inside Diameter (in.)	Thickness (in.)	Top (ft)	Bottom (ft)
Welded steel	0.5	7	5 3/4	5/8	0.5	20

### Borehole Notes:

The logging engineer measured the casing diameter with a caliper and steel tape. All log data are referenced to the ground surface.

### Logging Equipment Information:

Logging System:	Gamma 4L		Type: Serial No.:	SGLS HpGe (60%) 47TP32211A
Effective Calibration Date:	12/31/07	Calibration Reference:	HGLP-CC-027	
		Logging Procedure:	HGLP-MAN-002, Rev. 0	

### Spectral Gamma Logging System (SGLS) Log Run Information:

Log Run	1	2 Repeat		
Date	05/15/08	05/15/08		
Logging Engineer	Spatz	Spatz		
Start Depth (ft)	19.0	8.0		
Finish Depth (ft)	0.0	6.0		
Count Time (sec)	200	200		
Live/Real	R	R		
Shield (Y/N)	N	N		
MSA Interval (ft)	0.5	0.5		
Pre-Verification	DL361CAB	DL361CAB		
Start File	DL361000	DL361039		
Finish File	DL361038	DL361043		
Post-Verification	DL371CAA	DL371CAA		
Depth Return Error (in.)	0	0		
Comments	No fine gain adjustment	No fine gain adjustment		

### Logging Operation Notes:

Logging was conducted with a centralizer on the sonde. All measurements are referenced to ground surface.

### Analysis Notes:

<b>Analyst:</b>	Henwood	<b>Date:</b>	06/05/08	<b>Reference:</b>	GJO-HGLP 1.6.3, Rev. 0
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Pre- and post-run verifications for the logging system were performed before and after each day's data acquisition. The acceptance criteria were met.

A casing correction for a 5/8-in. thick casing was applied to the SGLS data.

SGLS spectra were processed in batch mode using APTEC SUPERVISOR to identify individual energy peaks and determine count rates. Concentrations were calculated with an EXCEL worksheet template identified as G4LDec07.xls using efficiency functions and corrections for casing, dead time, and water as determined from annual calibrations.

### **Results and Interpretations:**

Cs-137 was detected from 3.5 to 10.5 ft. The maximum Cs-137 concentration was measured at approximately 450 pCi/g at 5 ft.

Repeat sections acquired for the logging system indicate good repeatability.

### **List of Log Plots:**

Depth Reference is ground surface

Manmade Radionuclides

Natural Gamma Logs

Combination Plot

Total Gamma & Dead Time

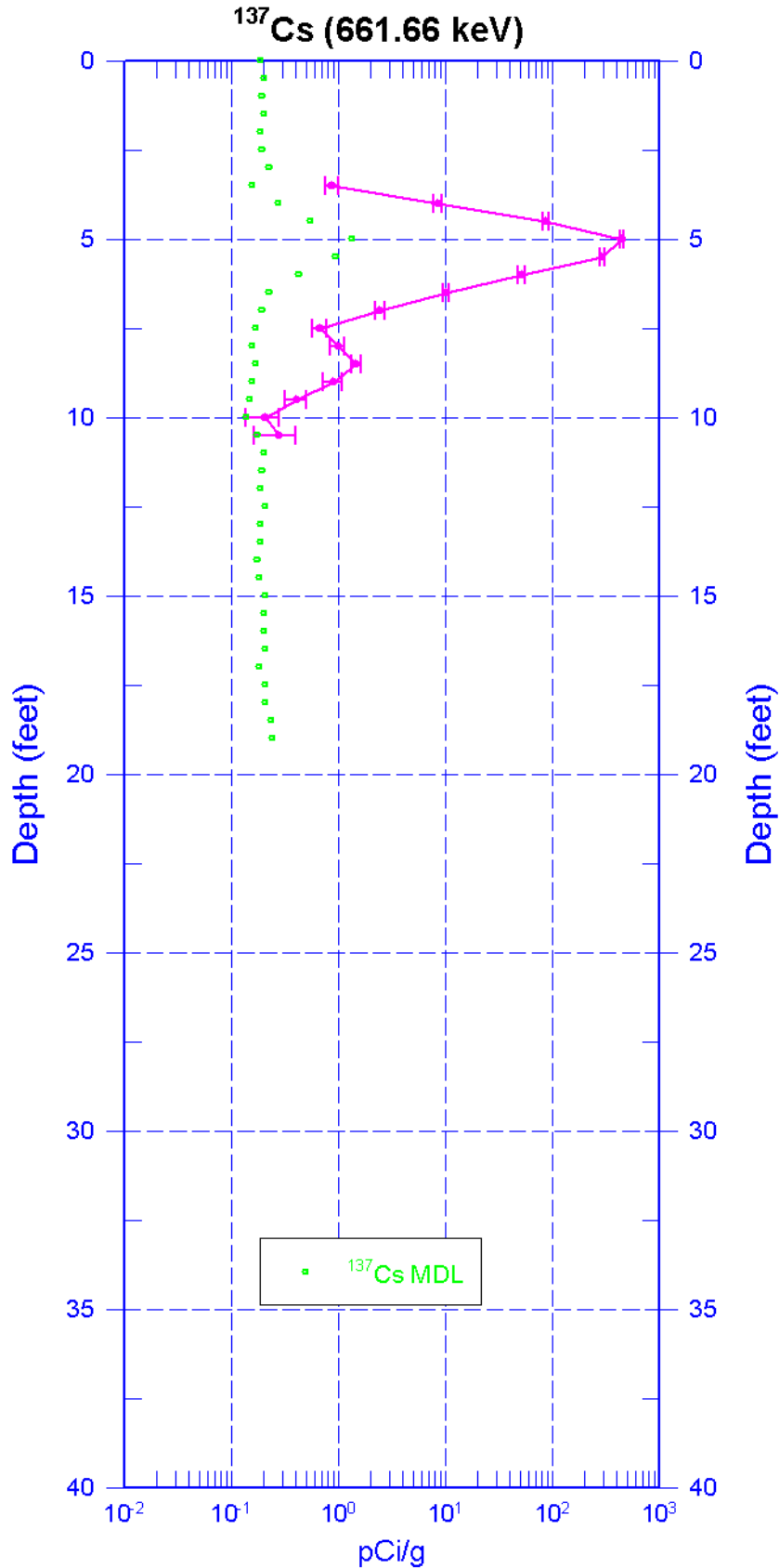
Repeat of Manmade Radionuclides

Repeat of Natural Gamma Logs

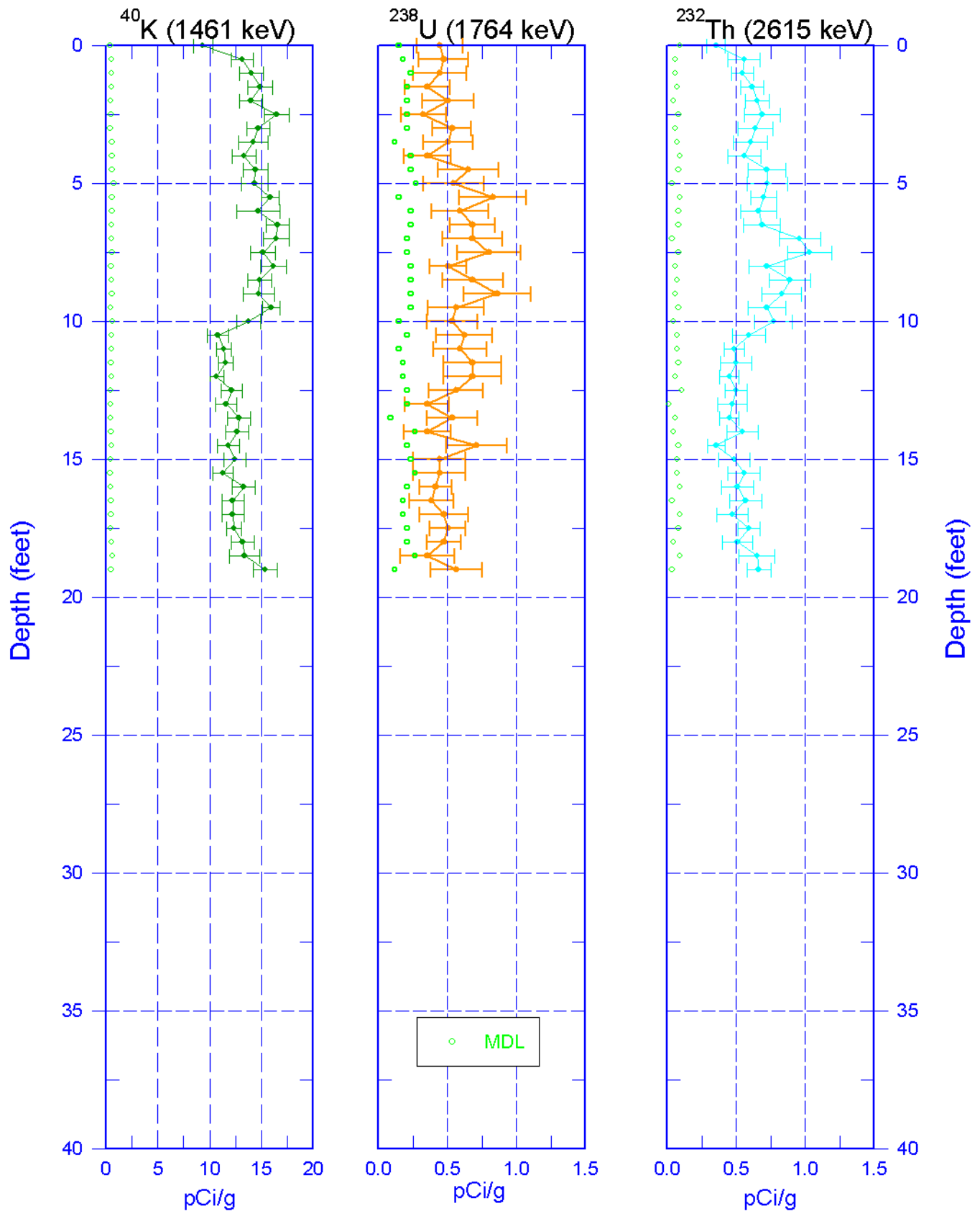
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<sup>1</sup> GWL – groundwater level

# C5772 Manmade Radionuclides

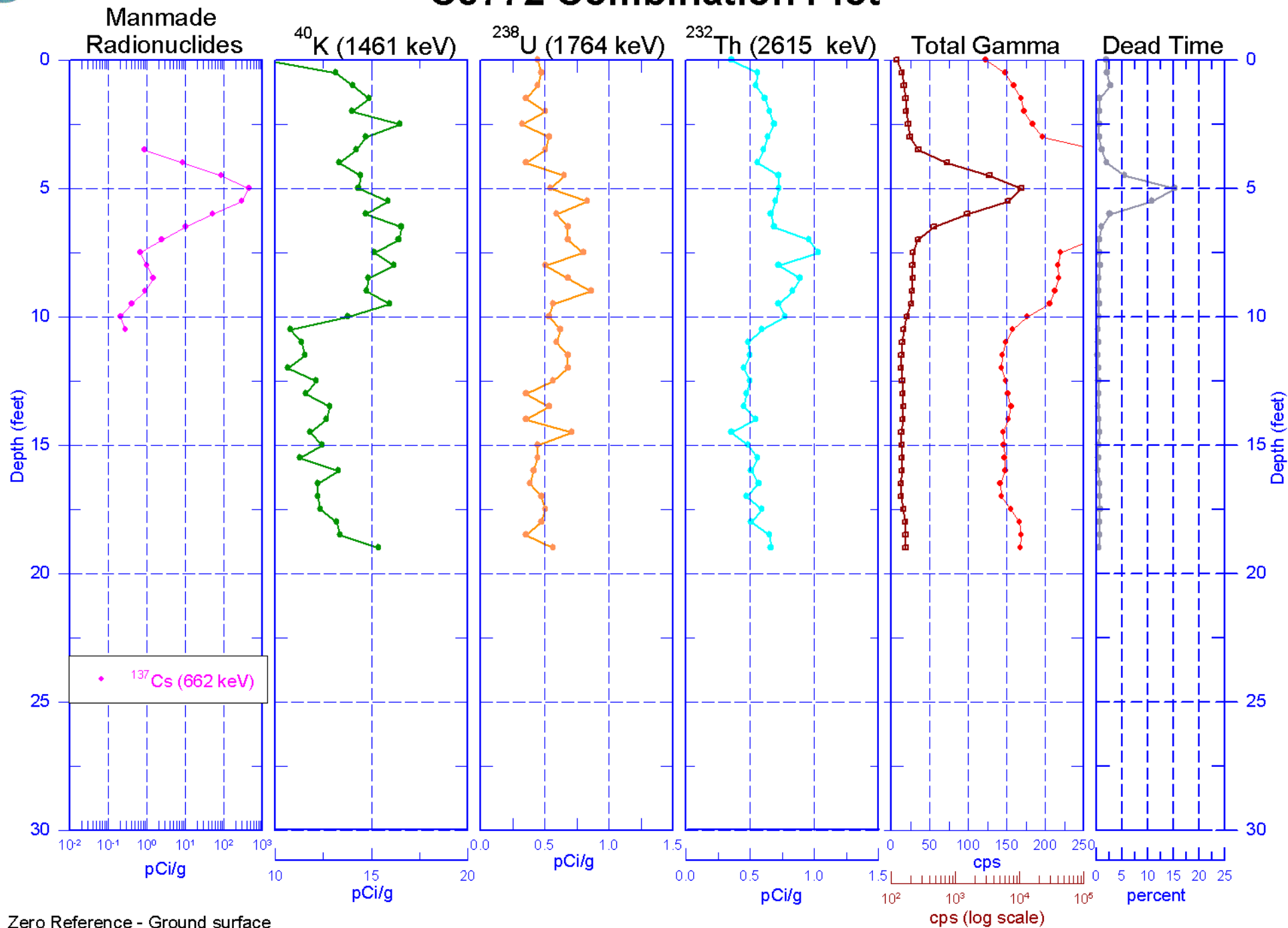


# C5772 Natural Gamma Logs



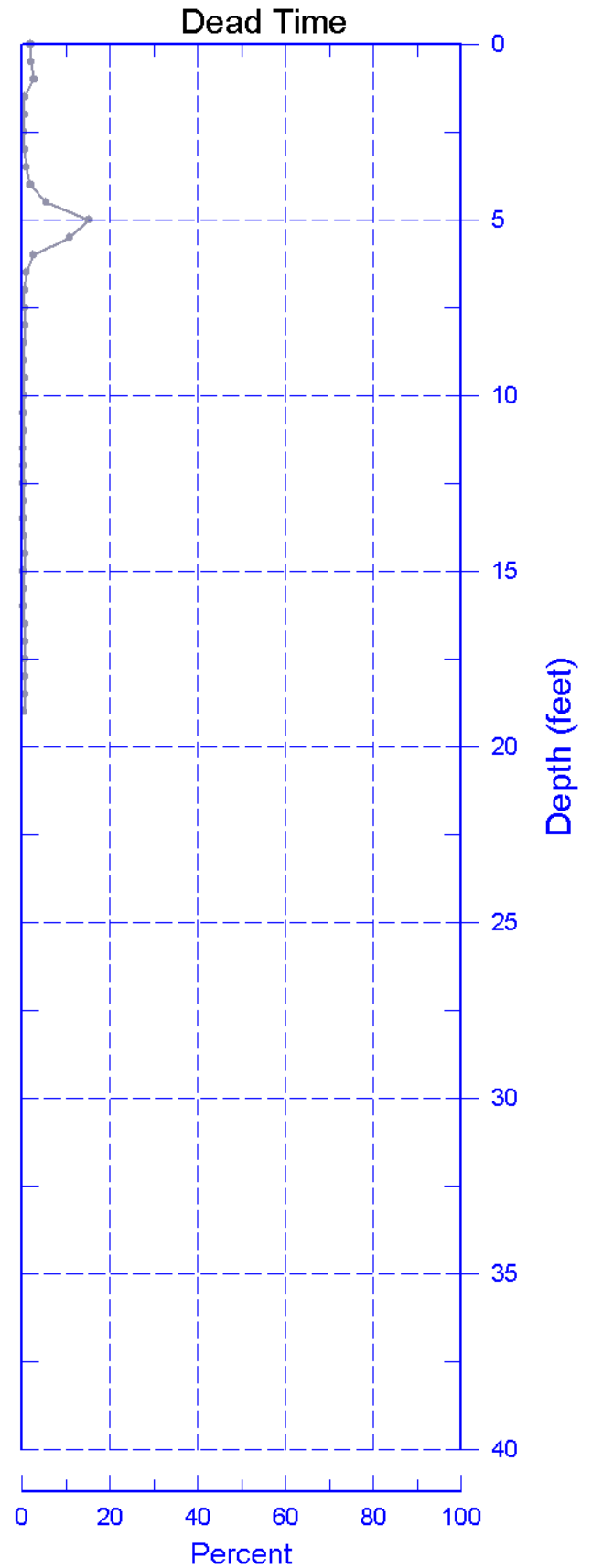
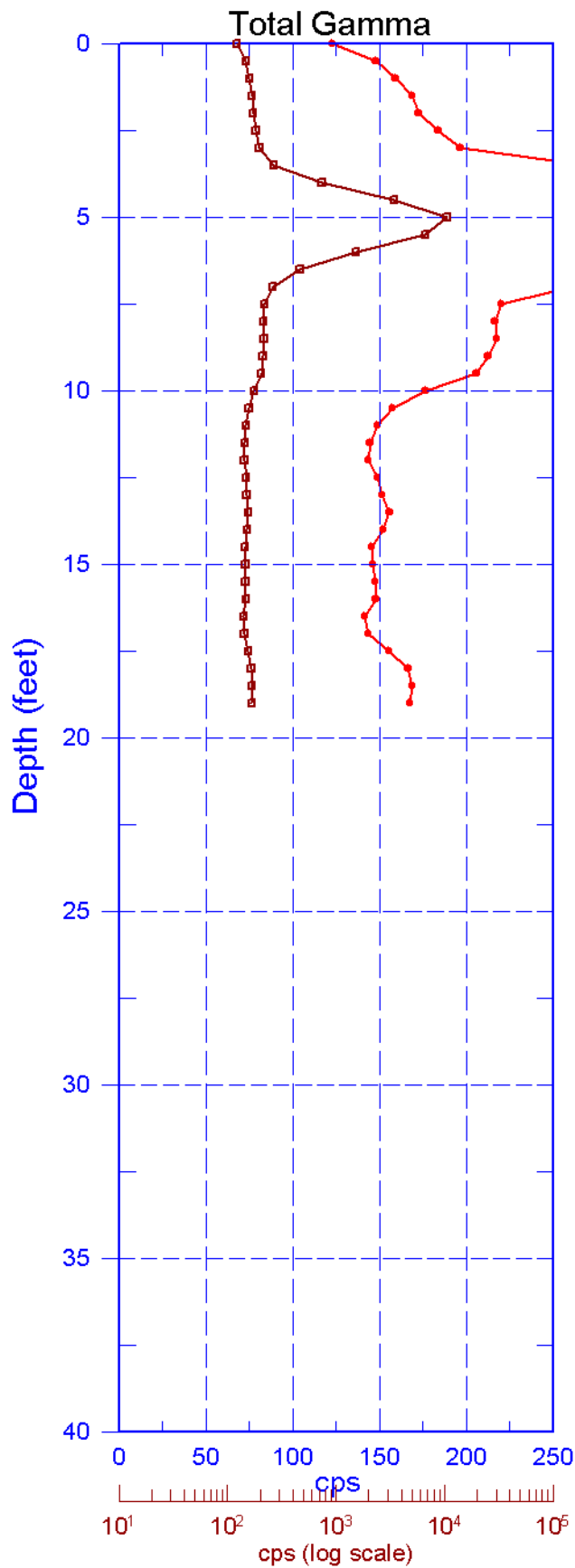
Zero Reference - Ground surface

# C5772 Combination Plot



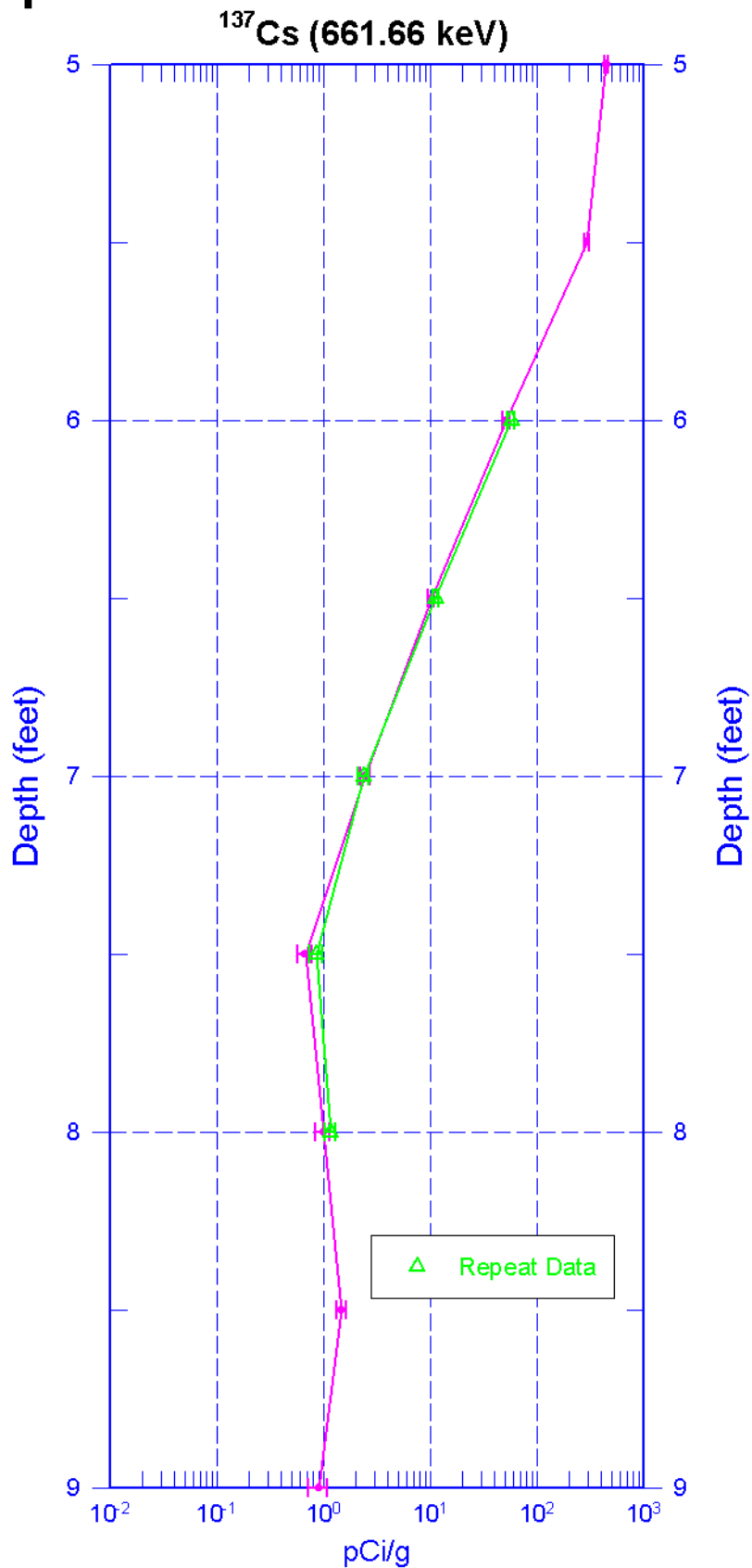
**C5772**

# Total Gamma & Dead Time

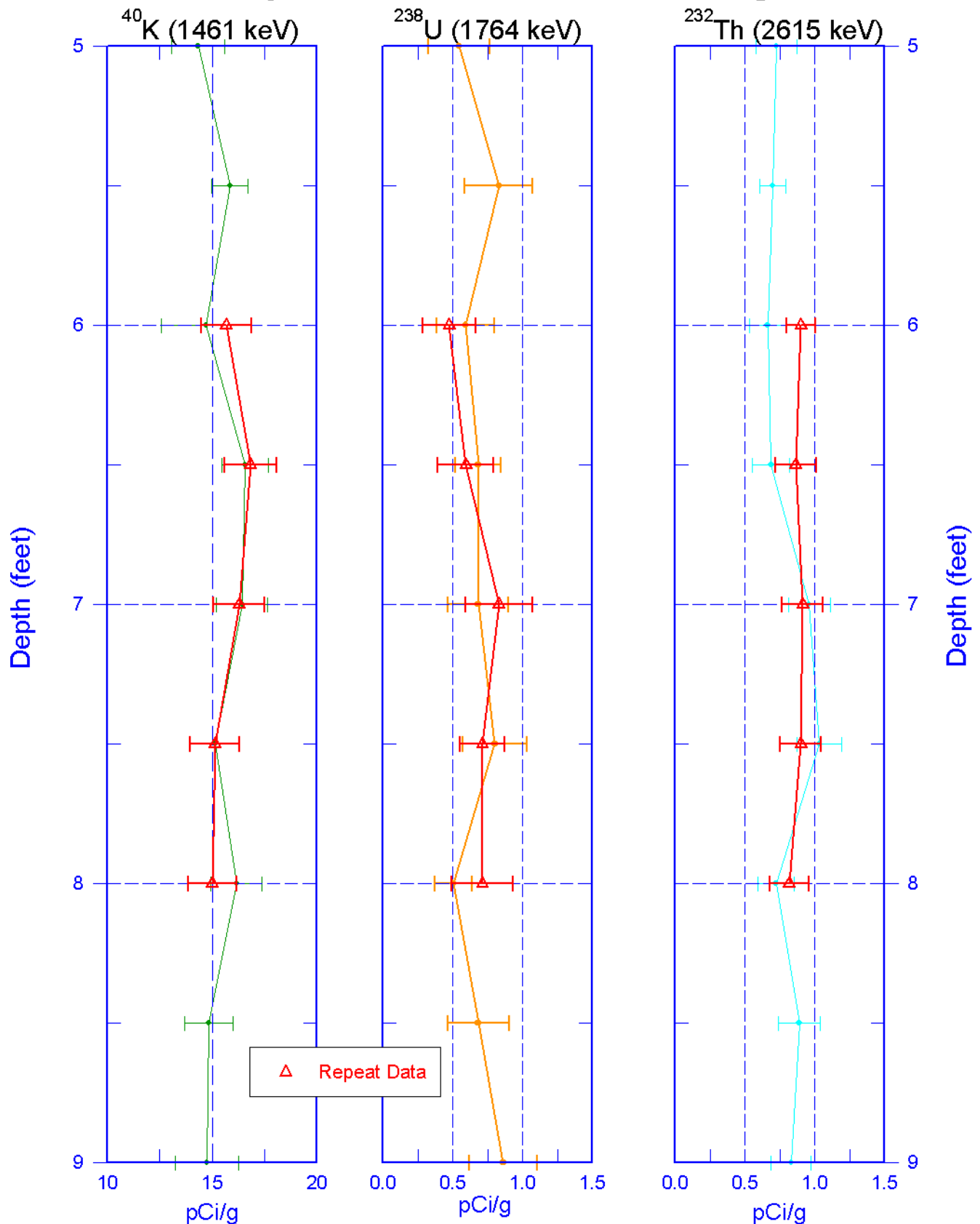


# C5772

## Repeat of Manmade Radionuclides



# Repeat of Natural Gamma Logs



Zero Reference - Ground surface